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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,559	09/26/2003	Tsuyoshi Kaneko	116945	8128
25944	7590	12/16/2005		
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			EXAMINER NASRI, JAVAID H	
			ART UNIT	PAPER NUMBER
			2839	

DATE MAILED: 12/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/670,559

Applicant(s)

KANEKO, TSUYOSHI

Examiner

Javaid Nasri

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 18-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 18-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/9/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Request for Continued Examination (RCE)

1. The request filed on 11/5/2005 for a Request for Continued Examination (RCE) under 37 CFR 1.114 based on parent Application No. 10/670,559 is acceptable and a RCE has been established. An action on the RCE follows.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 31 is rejected under 35 U.S.C. 102(b) as being anticipated by Keyworth et al (5,534,101, cited in IDS).

Keyworth et al discloses, **for claim 31**, a convex member (72) provided on a substrate (10), and an optical waveguide member (68, 70) provided solely on the convex member, the convex member being disposed in parallel with the optical waveguide member (outline lines are parallel).

4. Claims 16, 18-26 and 28-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Okada et al. (6,065,881, cited in previous office action).

Okada et al discloses (see figure 17A), **for claim 16**, a convex member (21) provided on a substrate (1, 2); and an optical waveguide member (see marked figure 17A, attached) provided

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solely on the convex member (see figure 17A, note that in the claim it is not specified at what stage the waveguide is solely on the convex member), the convex member having a lower refractive index than the optical waveguide pad, (PMMA has refractive index as 1.49, refer col. 8, lines 46-49 and Polyarylate has refractive index as 1.6, refer col. 9, lines 21-33, and according to claim 10 the material could be either PMMA or Polyarylate), **for claim 18**, a covering layer (see marked figure 17A, attached) being formed around the optical waveguide, and the refractive index of the convex member and the refractive index of the covering layer are approximately equal (can be same material, see claim 10), **for claim 19**, the convex member being integrally formed with the substrate, **for claim 20**, a cross-section of the optical waveguide member being in the shape of a truncated oval (see marked figure 17A, attached), **for claim 21**, a cross-section of the optical waveguide member being in the shape of a circle (see marked figure 17A, attached), **for claim 22**, an upper surface of the convex member being a curved surface (see marked figure 17A, attached), **for claim 23**, an angle made between an upper surface of the convex member and a surface that contacts the upper surface on a side member of the convex member being acute (see marked figure 17A, attached), **for claim 24**, an upper member of the convex member being formed in an inversely tapered shape (see figure 17A), **for claim 25**, the optical waveguide being buried under a layer (see marked figure 17A, attached) with a lower refractive index than the optical waveguide member (PMMA has refractive index as 1.49, refer col. 8, lines 46-49 and Polyarylate has refractive index as 1.6, refer col. 9, lines 21-33, and according to claim 10 the material could be either PMMA or Polyarylate), **for claim 26**, a first convex member (21) provided on a substrate (1, 2); an optical waveguide member (see marked figure 17A, attached) provided solely on an upper surface of the first convex member (see figure

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17A, note that in the claim it is not specified at what stage the waveguide is solely on the convex member), a second convex member (on the other side of 21) disposed in parallel with the first convex member; and a covering layer (see marked figure 17A, attached) that covers an optical waveguide member and is provided in member on an upper surface of the second convex member, **for claim 28**, an IC (2); and an optical element, **for claim 29**, an optical waveguide, **for claim 30**, an optical module (404), **for claim 31**, a convex member (21) provided on a substrate (1, 2); and an optical waveguide member provided solely on the convex member (see figure 17A, note that in the claim it is not specified at what stage the waveguide is solely on the convex member), the convex member being disposed in parallel with the optical waveguide member (depend which part of the convex member is compared with which part of the optical waveguide.

Note: USPTO interprets claims, giving claims their “broadest reasonable interpretation.”

(see, e.g., *In re Morris*, 127 F.3d 1048, 1054-55 (Fed. Cir. 1997)).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-15 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al.

Okada et al discloses all the limitations of claim 26 and all the structural limitations of claims 1-15, as shown above,

However, Okada et al does not disclose:

- a) For claim 27, two of the second convex member. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have two of the second convex member, since it has been held that mere duplication of the essential working members of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.
- b) In regard to claims 1-15, the claimed method language is counter member of the apparatus claimed. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to develop a particular method for the disclosed apparatus of the cited references.

Note: USPTO interprets claims, giving claims their “broadest reasonable interpretation.”
(see, e.g., *In re Morris*, 127 F.3d 1048, 1054-55 (Fed. Cir. 1997)).

Response to Arguments

7. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

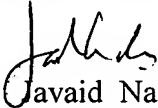
Contact

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javaid Nasri whose telephone number is 571 272 2095. The examiner can normally be reached on Monday to Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tulsidas C. Patel can be reached on 571 272 2800 ext 39. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Javaid Nasri
Primary Examiner
Art Unit 2839

JN

Jhn
December 7, 2005

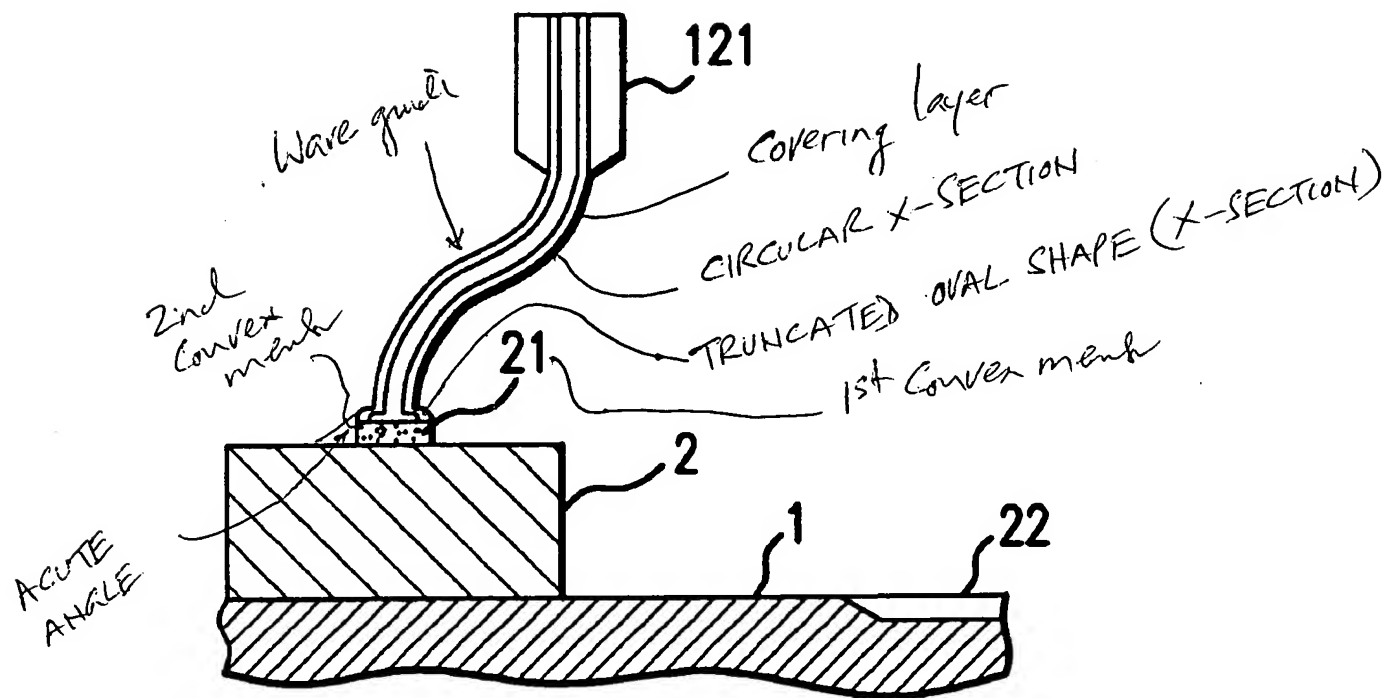


FIG. 17A

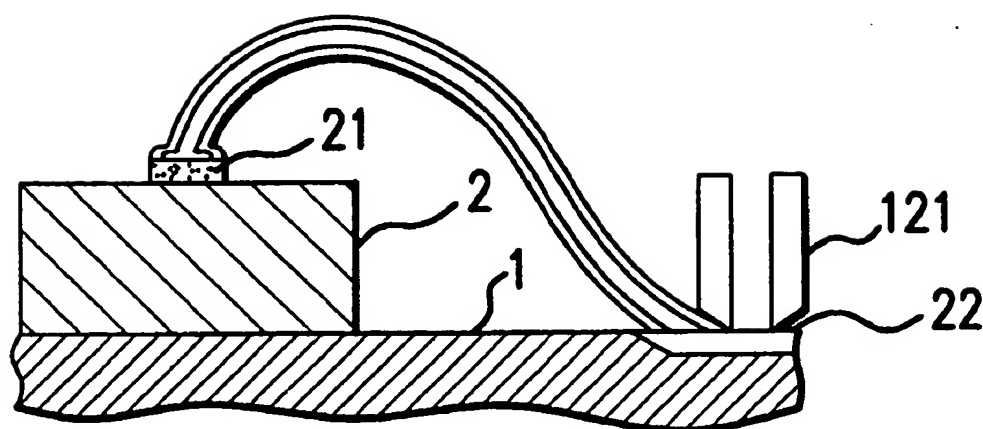


FIG. 17B